

Sawminathan and Gershon. This rejection is traversed on the grounds that the combinations proposed by the Examiner would be inoperable and/or would not result in or make obvious the claimed invention.

Claim 1 recites, “a sound source quantization section for quantizing a sound source signal of the speech signal by using the spectrum parameter and outputting the sound source signal”. This sound source quantization section comprises, “a discrimination section [370] for discriminating a voiced sound mode and an unvoiced sound mode on a basis of a *past quantized gain* of an adaptive codebook [500]” (emphasis added), and “a sound source quantization section [350] which has a codebook [351, 352] for representing a sound source signal by a combination of a plurality of non-zero pulses and collectively quantizing amplitudes or polarities of the pulses based on an output from said discrimination circuit section, and *searches combinations of code vectors stored in said codebook and a plurality of shift amounts used to shift positions of the pulses so as to output a combination of a code vector and shift amount which minimizes distortion relative to input speech*” (emphasis added). As explained in more detail in the previous amendment, claims 2-4 and 6-8 have similar recitations.

The Examiner acknowledges that Kleijn does not show or suggest “discriminating a voiced/unvoiced mode...based on a past quantized gain of an adaptive codebook”. Rather, the Examiner suggests this feature is well known in the art. The Examiner relies on Gerson as evidencing this feature. First, the Examiner should note that nothing in either Kleijn nor Gerson would suggest such a modification, and such a modification would not comport with the design and function intended for Kleijn. Second, the modification does not yield “a sound source quantization section [350] which has a codebook [351, 352] for representing a sound source signal by a combination of a plurality of non-zero pulses and collectively quantizing amplitudes or polarities of the pulses based on an output from said discrimination circuit section, and *searches combinations of code vectors stored in said codebook and a plurality of shift amounts used to shift positions of the pulses so*

as to output a combination of a code vector and shift amount which minimizes distortion relative to input speech" as is required in the claims. Quite the contrary. Kleijn has a characteristic feature that residual signals are coded by a time shift (see Kleijn column 6, line 14 et seq.). This feature is also not found in either Gerson or Swaminathan (the Examiner has relied Swaminathan merely as showing multiplexer and demultiplexer components). As such, no combination of Kleijn, Gerson or Swaminathan would make the claimed invention obvious, and withdrawal of the rejection is in order.

Reconsideration and allowance of claims 1-4 and 6-11 at an early date is requested.

Respectfully submitted,



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